BOSTON UNIVERSITY
SCHOOL OF SOCIAL WORK

A STUDY OF THE CAUSES OF THE ANTI-SOCIAL BEHAVIOR OF EPILEPTIC ADOLESCENTS

A Thesis

Submitted by
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CHAPTER I

INTRODUCTORY

A. Purpose and scope

This study is an attempt to learn more about the epileptic adolescent of normal intelligence who manifests some form of anti-social behaviour and to obtain a clearer understanding of the part his illness plays in hampering his normal development. It seems to this writer that too often in the past analyses of the causes of the anti-social behaviour of individual epileptic children have emphasized the effect of the disease itself; Scanty or no regard has been paid to the effects of the environment. Environment refers here to the total life situation of the epileptic child including the individual conflicts, dormant until adolescence, burst forth again at this phase of life. Often the solution which an adolescent attempts is one that brings him into conflict with society. The conflicts he is trying to resolve may or may not be related to the epilepsy as such.

What is the interrelation between epilepsy and the normal adolescent drives and how do the problems of one impinge upon and complicate the other, sometimes resulting in anti-social behaviour? To what extent do other individual problems, such as physical deformity, poor background, parental rejection, etc. contribute to the anti-social behaviour of the epileptic adolescent? This paper will treat the child

not only as an epileptic but also as an adolescent with the adolescent's special as well as the epileptic's general problems. Thus, for example, the reason for an epileptic adolescent's inability to get along with other children may be due to his chronic irritability;[1] on the other hand it may be caused by the other children teasing him about his seizures, or by a sibling rivalry in which he is rejected by his parents for a more favored sibling. While epilepsy as a contributing factor can not be overlooked, various emotional relations, interrelationships as well as general environmental data need to be studied in order to trace the motivating pattern. In this way a clearer understanding can be reached of the various aspects of the individual epileptic's life experience and the parts viewed as integral fragments of a total configuration.

The scope of this study is limited to those children who have acted out their emotional conflicts in an overt aggressive and destructive manner either to themselves or to others. Because the hospital from which the cases were drawn is a state institution, the preponderance of children from low income families is large, as the others may have been examined and given care in private hospitals. Frequently not

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1 One of the characteristics attributed to an epileptic in the so-called epileptic personality is irritability. M. Eyrich, "Character and character alteration in epileptic children and adolescents," Psychological Abstract, 3380, 1933.

enough weight has been given to the total social and emotional life experiences of the child. For this reason some of the records are meagre and lack information on parental attitudes, especially during the early development of the child at which time they are considered most important for the future emotional life.

B. History and present status of problem

The causes of the delinquency of the epileptic child have been little examined. This might be construed as meaning that delinquency of this special group is assumed not to have any special causal relationship. Unfortunately, the tendency has been to regard epileptic delinquency simply as a manifestation of an epileptic personality and no more. For purposes of this study, however, it may be well to view delinquency of epileptic children in the larger picture of delinquency to which a great deal of study has been given in order that our findings may be correlated with those of delinquency among the general population. While it would be interesting to know what percentage of epileptic children are delinquent, this would be difficult to determine as such children are usually committed to general institutions for the care of epilepsy.

Both epilepsy and delinquency for the most part begin during adolescence - the crucial period of the child's life. The relation that epilepsy has to delinquency is highly

speculative and can only be determined through individual case studies. The coincidence of their onset has probably contributed much to the theory of their causal relationship.

Among first admissions of children to institutions for the care of epilepsy those under twenty years of age constitute 48% of the entire group. The percentage increases regularly from the group under five years of age up to the group aged fifteen to nineteen. The rate of first admissions among those under twenty years of age is higher than for all epileptics. The rate increases until a maximum in this group is reached in the age fifteen to nineteen.[2]

According to Talbot,[3] if the incidence of epilepsy among drafted men in the United States is applicable to the entire population, about five hundred thousand individuals in the country are subject to epilepsy.

In view of so high a prevalence of epilepsy occurring shortly before puberty and having such a high percentage (75%) commencing before the age of twenty,[4] this writer feels that a study of the relation between epilepsy and delinquency is warranted.

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2. B. Malzberg, "The prevalence of epilepsy in the United States with special reference to children and adolescents," Psychiatric Quarterly, 6:89-96, 1932.

3 Fritz b. Talbot, Treatment of Epilepsy, p. 105.

4 Samuel H. Kraines, The Therapy of the Neuroses and Psychoses, p. 43

It may be well at this point to mention some of the theories of the causes of social delinquency formulated by students of this subject at various times in order to evaluate their various pertinancies to the cases of epileptic adolescents under consideration.

In the course of analysis of the causes and background of delinquency, stresses have at different times been variously laid, upon 1) physical abnormality, 2) hereditary taint, 3) underprivileged social milieu, and latterly with the advent of psychoanalysis into the field of social relations, upon 4) familial conflicts and repressions.

C. Sources of data

The twelve cases under study are of adolescent children of normal intelligence who were referred for encephalograma by the OutPatient Department or the House of the Boston Psychopathic Hospital. The findings in all cases indicated abnormal cerebral activity associated with epilepsy and included all types of epilepsy.

D. Method of Procedure

The encephalogram,[5] a device which reveals abnormality in brain waves, is used as the most objective criterion to

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5 F.A. Gibbs, E.L. Gibbs, and W.G. Lennox, "The electroencephalogram in diagnosis and in localization of epileptic seizures," Archives of Neurology and Psychiatry, 36:1225, 1936.

determine the presence of epilepsy, that is, to differentiate between the hysterical or psychoneurotic manifestations of epilepsy and those based on a real physical origin whether it be idiopathic or organic.

The period covered was from December 1939, when the encephalogram was first instituted at the hospital, to December 1943 when the writer was completing the research for this thesis. Of the total thirty-five cases of children between the ages of elevan and twenty-one who had been tested by encephalograms, fifteen were discarded because they were mentally deficient and four because records were unobtainable or the information insufficient. Of the remaining sixteen, four had been referred primarily because of physical condition; accompanying conduct disturbances had been secondary.

This study is limited to those children who were brought to the hospital primarily because of anti-social behaviour. The sources of referral for these cases were mainly the court or the family.

The cases were then analyzed with a view toward determining a possible correlation between the length of illness, its severity, and the outbreak of anti-social behaviour. The child's general adjustment prior to hospitalization was studied with special emphasis on the part epilepsy played in complicating his normal adolescent development. His physical make-up, and home environment were also examined to determine

what further handicaps the child had to face and the role they played in his emotional difficulties.

Tabulations were made to point up similarities and differences among the group studied. Finally, the findings were summarized and conclusions were reached.

In addition, the literature pertaining to the medical and psychological aspects of epilepsy and that dealing with delinquency of juvenile offenders was surveyed. The problems and development of normal adolescence was reviewed at the same time in order to get a total picture of the problems of the epileptic adolescent.

E. Definition of terms

Epilepsy — "Epilesy is a neurologic disease characterized by convulsions; and since convulsions may result from many different causes, one needs to speak of different types of epilepsy. There is the epilepsy of gross brain disease such as syphilis, meningitis, brain tumor, traumatic injury; there is the epilepsy secondary to toxins such as alcohol, uremia, eclampsia; and there are the epilepsies which are without apparent cause, and which are termed idiopathic epilepsy. However... this last mentioned type...we know too little to be more specific as to etiology;..."[6]

adolescent — This term is used here as meaning the beginning of puberty, defined by Zachry and Lighty, as having its onset in some boys at twelve years of age and in others at seventeen; in girls beginning one or two years earlier. One case of an eleven year old boy was used in this study because he was later re-referred. The top limit was set at twenty-one.

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6 Samuel H. Kraines, op. cit., p. 19

anti-social behaviour — As used in this study, the term covers all types of aggressive behaviour which brought the individual into conflict with the school, family or society at large.

delinquency — This term is used here in the accustomed meaning as that type of behaviour which brought the individual into conflict with the law.

Anti-social behavior is used in a broader sense of including both those children who have not as yet been brought into court for their aggressive behaviour and those who have. Spells, seizures, fits, attacks are used interchangeable for describing what is characteristic of the illness of epilepsy.

CHAPTER II

GENERAL VIEW OF THE PROBLEM

A. Medical picture of epilepsy

1) History and etiology

Epilepsy in the Greek means "I seize" or seizure and at the beginning described only what is now called "grand mal" although today it includes many different epileptic forms. In the early stages of civilization in some regions people considered epileptic seizures as the soul leaving the body temporarily; later, they believed that some demon or other malignant spirit possessed the body. It was not until Hippocrates wrote about epilepsy that it was attributed to "natural causes." It was he also who noted that epilepsy was not apt to develop after the twentieth year of life. Although various descriptions of the disease were added in the following centuries, only with the advent of modern scientific methods of study in the nineteenth century was fuller understanding of the disease reached.[7]

Many writers have segregated patients, who present no significant abnormality on physical exmination, and whose seizures therefore, are, presumable, due to an inherent tendency to convulsive seizures, into a group labelled "essential" or "idiopathic." However, William G. Lennox and Stanley Cobb

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7 Fritz B. Talbot, op. cit., p. 72

feel

> "...that because it seems probable that all patients having seizures from whatever apparent cause possess this susceptibility to seizures in some degree and because there are no means of determining whether it forms 10 or 90 per cent of the total influence making for seizures, the clinical use of such a term as "essential" only obscures the issue. Some disturbance of the brain exists in all cases in which seizures occur."[8]

Some psychoanalysts explain seizures on a psychogenic basis - seeing in convulsions an infantile unconscious striving after displeasure-pleasure pursuit ending in a final goal of a return to infancy. Other authorities regard this analysis as a symbolical explanation of an essentially neurological process. According to Kraines,[9]

> "...epilepsy is a neurological disease characterized by convulsions; and since convulsions may result from many different causes, one needs to speak of different types of epilepsy. There is the epilepsy of gross brain disease such as syphilis, meningitis, brain tumor, traumatic injury; there is the epilepsy secondary to toxins such as alcohol, uremia, eclampsia, and there are epilepsies which are without apparent cause and which are termed idiopathic epilepsy."

However, Kraines also feels that even idiopathic epilepsy,

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8 William G. Lennox and Stanley Cobb, Epilepsy, pp.55-56.

9 Samuel H. Kraines, op. cit., p. 86.

which many doctors feel is aresult of a recessive Mendelian gene, is due generally to brain damage early in life which is manifested only as the organism approaches maturity.[10]

2) Types

The forms epilepsy take are varied and are described as follows. (1) First is grand mal where the seizures are sometimes preceded by an aura or warning.[11] Uttering a loud cry the patient loses consciousness and falls to the ground in convulsions. In the tonic stage there are muscular contractions, features are distorted and pale. Muscular rigidity prevents the respiratory movement: pallor gives way to suffusion, then to lividity. Biting of tongue follows; eyes become insensitive and pupils dilate. The clonic stage include jerking and stuporous activity. Finally, a period of complete relaxation leaves the patient lying senseless and prostrate.

(2) In petit mal there is a momentary loss of consciousness in some cases, in others, fainting or periods of dizziness occur accompanied by peculiar motions in which the head drops forward or turns to one side. The eyes may become fixed and

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10 Ibid, p. 102. "It is not unlikely that trauma sustained during birth (many normal children have blood in the spinal fluid at birth) and toxic involvement of the brain after children's diseases (measles not infrequently leave a clinical encephalitis and in many instances there is probably a subclinical involvement of the brain which is not observed but which may leave a residual damage that may predispose toward epilepsy."

11 Ibid, p.43

expressionless and the arms may be contracted. In the majority of cases, the number of attacks varies from two to three dozen a day.

(3) Jacksonian epilepsy is said to result from abnormalities of the cerebral cortex. Convulsions are restricted to the region presided over by the abnormal part of the brain. In some cases, however, the attack becomes generalized before it is concluded. In the intervals between attacks the patient often suffers from headaches or from a strong sense of anxiety and fear. They are at all times susceptible to fatigue.

(4) In status epilepticus seizures recur at such brief intervals that there is no opportunity for complete recovery from one attack to take place before the next begins. The temperature may become very high and attacks frequently end in cardiac dilation, pulmonary edema, loss of reflexes and death.

(5(Nocturnal epilepsy occurs during the night and often the patient is unaware of his attacks, which may be precipitated by many factors including great excitement, improper diet, constipation, changes in weather, etc.

(6) Epileptic equivalent is the term for abnormal mental conditions which may take the place of an epileptic seizure or develop after an attack of grand or petit mal. A change in disposition results in fits of anger or destructive violence which the epileptic does not remember after the attack has passed.

3) So-called "epileptic personality"

Pertinent to this discussion is a study of the so-called epileptic make-up, usually held to include irritability, irresponsibility, selfishness and impulsiveness. These traits are generally accepted as primary constituents of the epileptic mind, as though they were inborn, and as if they were dependent in some way on the peculiar construction of the nervous system of those who suffer from a given type of convulsive seizures.

> "....In order to understand these types of characters it must be recognized that the subject of convulsive attacks is placed under a series of very adverse circumstances. Epilepsy is naturally regarded as a most serious illness. It is terrifying to the patient and to those around him. With the accepted treatment...ideas... of its incurability, the mental life of the patient becomes an unfortunate one. The presumed hyperexcitability of the nervous system...leads to the advice that all exciting stimuli should be avoided, his will mustnot be opposed, and his education should not be forced lest he strain his brain. The only result to be expected is that the child is utterly spoiled; he develops a habit of demanding his own way, of claiming excessive sympathy, of believing in the danger of straining his mind." [12]

What also happens is that, if a patient should injure himself during an attack or should be seized on an awkward occasion, he becomes frightened and watches himself with great

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12 R.C. Rows and W.E. Bond, Epilepsy, p.251.

anxiety for signs of another seizure. Many feel relieved for a few days after a fit, because they know that they will be safe for a time before another occurs. This state of anxiety is itself an important factor in leading up to subsequent attacks. Sometimes too, the patients develop so great a dread of attacks that they are afraid to go anywhere alone lest they should lose consciousness in a public thoroughfare. However, epileptics also have to face social ostracism and economic disability. The stigma attached to the illness has by no means been removed and unfortunates stricken by this malady have less chance to participate in normal activity and to be accepted as equals in normal social groups. Again, employers, now that they are liable for compensation, will not give work to those suffering from this dangerous illness. (The war may have changed this condition to some extent.) However, in ordinary times, the epileptic finds it extremely difficult to get employment, or to make a living of any sort. Recognition of all these adverse factors produces in him a despair and an intense sense of injustice.

> "To say that the two principal characteristics of the epileptic are irritability and impulsiveness throws little light on the subject. Epileptics, like those who suffer from other forms of mental illness, must be considered individually, and if this be done, it will be found that the varities of disposition amongst them are as great as amongst other people. They may be gay or sad, irritable or submissive, self-assertive

> or lacking in self-confidence. They may be intelligent or ignorant, alert or dull; it is essential to consider the individual and not the mass."[13]

Following this kind of discussion further, it is interesting to note that much controversy also surrounds the question of whether or not deterioration of mental faculties is an inherent process in epileptic children.

On one side, there are studies such as that of Kugelmass, Poul and Rudnick[14] who studied 220 epileptic children, selected from groups of institutional children and those coming under private practice, from a medical and psychological aspect. A variety of mental tests and scales were used but not all were given to each child. Retested after a period from three months to three years, it was found that normal mental growth occurred in those whose seizures were diminished or arrested. According to these authors mental deterioration was prevented by treatment whether drug or dietary.

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13 R.C. Rows and W.E. Bond, op. cit., p. 88.

14 I.N. Kugelmass, L.E. Poul and J. Rudnick, "Mental Growth in Epileptic Children," Proceedings of the American Association of Mental Defectives, 1937, 4259-66.

On the other hand studies such as those made by A.L. Collins, C.R. Atwell and Moore;[15] and that of J. Fetterman and M.R. Barnes[16] and others find no direct relation between intelligence, type, severity, or duration of the disease.

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15 A.L. Collins, C.R. Atwell and M. Moore, "Stanford-Binet response patterns in epileptics," American Journal of Orthopsychiatry, 1938, 8, 51-63.

16 J. Fetterman and M.R. Barnes, "Serial Study of Intelligence of patients with epilepsy," Archives of Neurology and Psychiatry, Chicago, 1934, 32, 797-801.

B. The Adolescent

1) Physical Picture

As is generally known, the maturation process during adolescence effects a very complete reorganization of body and mind of the child. For adolescence, growth has a physical phase, which is concomitant with the effect of the growth itself, that is, there is a physical and psychical interaction.

The adolescent builds and develops the material which is available from his childhood.[17] Thus, there may be a persistence of congenital characteristics, of physical defects, of structure elements that may be incidental to accidents or that required amputation, physical habits, etc. With the maturation in process and a growing consciousness of oneself, more and greater intensified feeling is centered around old defects or handicaps, and contrawise around specially prized elements.

Puberty, according to Zachry and Lighty[18] develop in some boys at twelve years of age; in others at seventeen. In girls puberty usually begins one or two years earlier.

The first factor of growth is the endocrine system. Here the various glands such as the thymus, the thyroid, and the pituitary, develop and become active in effecting body growth, height and metabolic processes. The pituitary also produces at this time the sex hormones which are responsible for the development of marked sexual characteristics of the

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17 Ira S. Wile, The Challenge of Adolescence, pp.48-51

18 Caroline B. Zachry and Margaret Lighty, Emotion and Conduct in Adolescence, p. 75.

male and female. The sex glands (gonads, testicles and ovaries) are significant elements in developing masculinity and femininity as dominant elements in the personality organization.

The adolescent is more responsive in all of his senses because of the physical maturating process. In any and all situations, therefore, he experiences an excitement and a heightened response.[19] He finds new values of himself developing from his own consciousness of increased strength and power and his altered anatomy. This may be a source of worry as well as joy. The different changes at different rates for various children create problems. The difference in being fat or thin, tall or short, sexually mature or immature, in relation to ones friends and contemporaries, creates anxieties and fears. The boy with undescended testicles may have a castration fear; the girl who is frightened by menses may feel it is a punishment for masturbation.

Since influences from society usually lengthen the process of the adolescent's social and emotional growth and make it as incidental to the process of his physical change, the latter is disturbed by erotic feelings and observations, anxieties and uncertainties.

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19 Caroline B. Zachry and Margaret Lighty, op. cit., p. 98.

> "...for every adolescent a changing body means also a changing self - a fundamental transition rarely, if ever, wholly free from self-doubt and social-emotional perplexities..." [20]

2) The Social Adjustment

The adolescent in the process of maturing physically into an adult is yet neither child nor grown-up, and at the same time is a little of each. While he often longs for the privileges of adulthood into which he is about to enter, he feels too uncertain for the most part to take on completely the responsibility it entails. At the same time he is asked to give up many of the child's privileges and protections. How ready he will be to relinquish them will be dependent, to some extent, on his earlier experiences and satisfactions. For some deprived of emotional security in babyhood still seek satisfactions of the same quality as those missed to them. It may be impossible for these adolescents to accept the fact of being taken away from situations in which indulgence and protection were their unquestioned right.

During this period of life, the adolescent tries to adjust to certain new or newly reorganized social situations. In the earlier part of adolescence he naturally is drawn into a group of other adolescents of his sex, it would seem for

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20 Ibid., p. 102.

protection and consolidation against the adult world, who is taking away his old privileges and not yet giving him status of an adult. Therefore, conformity to his own group is very important to the adolescent, for only in this way, can he gain acceptance and thus some security. The misfit is ruthlessly abandoned.

The social group the adolescent will enter depends in most cases upon the social milieu of his parents and thus is determined by them. Often the rebellion of the adolescent at this time against his parents, which frequently turns against all authority, will be expressed in moving toward a completely different social group.

The natural rebellion, which is felt against the parents who continue to control the adolescent though he feels capable enough to take care of his own affairs, (which feeling vacillates with that of his feeling of inadequacy), is frequently aggravated by previous unsolved conflicts around the Oedipus situation. At the same time, the adolescent is not independent of his guardians, financially or emotionally.

Many of the older adolescents must make a choice vocationally, especially, if they cannot prolong work because of family finances. To some this situation fits in with their own emotional needs at the time. To others, however, who have found the process of growing up especially difficult, this fills them with new anxieties and fears. In periods of econo-

mic depression when jobs are scarce especially for young inexperienced wage-earners, it works real hardships on the first group. Then too, the younger, more aggressive adolescents or the handicapped ones with strong drives will naturally meet more frustrations in this area at all times, especially, if their needs for assertion is very great.

Important too, is the adolescent's social adjustment to members of the opposite sex. The ways he or she will proceed to meet them and act toward them again depends on the social and cultural background of the parents and the familial relationships, unless, of course, the child is expressing his rebellion by not conforming to their standards.

3) Emotional Drives

Many of the emotional drives of the adolescent have already been discussed in connection with the physical and social aspects of his development. However, the sexual drive, one of the powerful, if not the most powerful element in this phase of life, has not yet been mentioned. This drive becomes very powerful with all the physical changes taking place with the development of the sex hormones and secondary sex characteristics. And yet, there is seldom real opportunity in our present day society where the age of marriage is later than that of maturation and where premarital relations are forbidden, to express this urge directly. Instead the adolescent

must sublimate this drive in various activities, athletics being the most popular method. Often it will take the form of intellectual pursuits, especially, in the less robust adolescent.

Another important area of emotional drive, as already discussed, to some extent, elsewhere, is the breaking away from the emotional tie with the family and the assertion of independence. At the same time while there is this need, there is also an accompanying need for this same emotional dependence. In this duality of emotion and ambivalence there is much stress and strain. The fact of economic and social dependence on the family complicates the situation further. The psychological weaning from the family group constitutes a long and difficult emotional process often acompanied with much trauma.

The adolescent's conception of himself, will, of course, vary with individuals and depend on earlier experiences. In general, however, in normal adolescence, this feeling vacillates between that of having much self-confidence and great ego strength ad that of uncertainty and inadequacy.

The above description of the adolescent has been in general terms. It must be borne in mind, however, that how the adolescent will meet his individual problems and solve his emotional needs will always depend on his earlier total life experiences.

CHAPTER III

ANALYSIS OF CASES

Case I

Patient, a sixteen year old girl, was committed to the House by the Court on a charge of amoral behaviour and because of a history of spells.

About one year previous to the court action, she began to grow more aggressive than she had ever been. She insisted on going out fairly frequently without saying where she was going. Recently, it was discovered that she was having sexual relations with a Chinese laundryman and a seventy-six year old Negro neighbor.

The history of spells dates back five years. They occurred on the frequency of one per month, and consisted of staring into space, drooling, and slight tremors of extremities bilaterally and rigid clutching of the abdomen. The girl was slightly confused after the spells. The encephalogram revealed findings "consistent with a mild form of epileptic disorder."

The father, a garbage contractor, was a friendly, outgoing and a chronic alcoholic; the paternal grandaunt, an imbecile, and the maternal second cousin, epileptic. The mother was very ill with tuberculosis during pregnancy and delivery. Labor was prolonged and difficult. The mother died four months after the birth of the child. Patient had no contact therefore with the mother after the birth but was cared for by a nurse until he wa two. She walked and talked later than most children, was eneuretic, and sucked her thumbs until she was three or four years old. When she was two years old, she went to live with a paternal grandmother and aunt who were very fond

of her but were very strict. The father lived separately. The other sibling, a boy of twenty-one, was a college student and seemed well-adjusted.

Patient finished Junior High School at the age of fifteen. She was kept back in the third and eighth grade and her marks were only fair though she is of average intelligence. She did not go on to High School although she wanted to because her father did not think she had the mental capacity.

The girl had never worked outside her home, and did not help with the housework; nor did she have any sociâ contacts. The few friends she did have were younger than she, and the grandmother and aunt said they had practically to bribe them to play with her. She was described as being stubborn, self-centered and unstable as well as careless about her appearance.

Analysis

Here is seen a sixteen year old girl whose family background shows considerable pathology such as alcoholism, epilepsy and mental defectiveness. She suffered early deprivation and lack of both mother and father. Consequently, there was much instability and no continuity in her early training. Her only substitutes are women and she has no strong male identification. She early developed habit disorders indicative of her need for love and the lack of emotional satisfaction. The overprotectiveness of the patient by the aunt and grandmother might be symptomatic of their rejection of her, e.g. they felt children would not play with her and so had to bribe them to do so. They gave her no responsibilities in the household for fear of epileptic attacks and so all avenues of normal

adolescent outlets seemed blocked to her in the lack of social, educational or work contacts and the denial of satisfactions.

The father plays little part in this girl's life. It can be questioned as to whether she has ever had the opportunity of identifying with him as her father or with any other man as a father substitute. The meaning of her sexual experiments with older men, Chinese and Negro which would be socially unacceptable by her relatives would lead one to believe that she feels herself to be inferior and possibly is seeking in these relationships with older men the father she has never had.

Summary

There is enough pathology and disturbance in the familial relationships, e.g. rejection, insecurity, lack of male identification to explain the deep seated conflicts which this adolescent girl has had to resolve.

While epilepsy would appear a complicating factor in this girl's development, it would not appear most important.

Case II

> Patient, a twenty-one year old boy was referred by his mother because he was stealing, continually lying, seeking attention, and being generally intractable. In addition there was a history of spells.
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> The convulsions date back four years. They occurred both day and night. His head would turn to the left, his eyes went up and then he would cry out and at times

became blue in the face. There was no soiling or biting but a shaking of his hands. The encephalogram was found "abnormal."

A short time after marriage, the father separated from the mother saying that he left home because he had stolen some money and was trying to pass up a prison sentence. They were divorced eight months after patient was born. Patient lived in various hotels and was never able to play with children his own age. The mother later went to live with a maternal grandmother. The family were usually supported by a maternal uncle who also lived in the house. The family lost most of their money and there was much discord in the home. The uncle tended at times to overindulge patient and his twin and to spoil them but at other times he became punitive and resentful of supporting the family.

Patient is the older one of twins, the other sibling being a girl. Forceps and anesthesia were both used, and the girl was in the delivery room for three days. Patient was a nervous child and at three or four he stuttered and would wave his arms up and down if he wanted words to come out. Mother felt this was due to the discord in the home between the grandmother, mother and uncle. He walked later than his twin and had to have his formulae changed frequently. In his early High School years he had rheumatic fever but no heart condition developed. For the larger part of his life he had asthma and bronchitis with a great deal of wheezing. When examined, however, he appeared well-developed and well-nourished.

There was a great deal of shifting around of the boy. When he first developed rheumatic fever in his first year in Junior High School, he was hospitalized for a number of months. Then he was home con-

> valescing for a while, and then returned to school but to a different one then he had been attending. He was unable to get along there, could not do his work and was a bad influence on the other children with whom he did not get along. He was then transferred to a sanitarium because of the sudden onset of convulsions. For a time there was improvement in that he settled down to do ome school work but then there was a reversion to his old behaviour and it became increasingly worse.
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> He has been interested in a few young girls but usually in a platonic way. He said he did not care for petting as he didn't believe in it. Moreover he planned to marry a girl whom he had always seen with a chaperon at the time of his visits. He has rarely worked usually being a student but had on occasions done odd jobs.

Analysis

This boy's background appears to have been a very unstable one. The father apparently is an immature person who could not face difficult situations and the mother, on the other hand, seems rather a dependent woman who could not learn to make alife of her own. Lacking the stability of normal parental contacts and brought up in a discordant unhappy household, the boy early became nervous and difficult. His feelings of insecurity are seen in his learning to walk later than his sibling and the difficulties in his formulae and in his stuttering. It is interesting to note in this connection that the twin, who is of the opposite sex, presents no problem.

One would speculate on the extent of the mother's rejection of the boy on the basis of identification with the husband who left her. This apparent rejection of the child is seen in the frequent changes to various boarding schools. In addition, there is a history of illnesses much of which seemsto have been based on a neurotic need for attention and love. Moreover, because of his illnesses he was frequently hospitalized and away from school add normal adolescent contacts and outlets.

The difficulties presented upon admission, namely lying, stealing, and conduct disorders seem to be the results of a boy who suffered from emotional insecurity and parental rejection from an early age. The fact that the uncle resented the responsibility of caring for the family and was inconsistent in his handling made it difficult for the child to identify with him. The boy's difficulty in making any adjustment to girls other than on a platonic basis would further corrobrate the disturbed relationship with the mother and the lack of strong identification with a male personality.

Summary

The fact that this child was difficult even before onset of seizures and that there is enough pathology in the family and the interrelationships to explain his problems would indicate that his present difficulties may have another basis other than the epilepsy.

Case III

Patient, a boy of nineteen, was brought to the hospital by his father because of episodes of uncontrolled rage in which he attacked police officers, neighbors and even his parent. In addition there was a history of convulsions of three years duration.

His first attack occurred some time after he had been knocked unconscious while playing basketball. Since then there had been recurring episodes of uncontrolled rage. The attacks began with some movement in his left arm ad he then became stiff. Occasionally he fell. These spells occurred sometimes as often as three or four times a week, other times once in every two or three weeks. The encephalogram showed definite evidence of cortical damage in the portion of the right hemisphere and it was felt there was some organic brain disturbance.

The parents had been separated ever since the patient was one year old and then they got divorced not long after that. The mother remarried since then. The father, an auto salesman in giving the history made it appear that the children had been with the mother first but later said that they were with him and he had hired women to care for them. The two older siblings, a girl and a boy are married and out of the home.

Patient went as far as the first year in High School and then to Trade School for a year. He left two years ago because he had to stay out too much due to his spells. He has worked irregularly, for a while being employed as a sheet metal worker. However, he was always getting into difficulty on hisjobs and for that reason has never been able to be gainfully employed. He said that he could not hold a job becauaw every time he began to work, he had a spell and lost his job. Patient has

> always been able to make friends easily and gotten along well in a group, participating in their activities. He has had a sexual experience with a girl, goes out with them and had no difficulties in associating with them. Father described him as being good natured but that he got upset if disciplined.

Analysis

There has been some early traumatic experiences and emotional instability for this boy in that the parents separated when the boy was one year old and subsequently were divorced. Evidently there was no continuity in the early training and there were successive women to care for him. Although little is known of the parental attitudes and the environment of the boy, it would appear that the father was the more accepting of the two parents since the children remained with him and the mother remarried and subsequently removed herself from them.

Prior to hospitalization the boy appeared to be fairly well adjusted. He left school because of the attacks and went to a trade school where he learned a skill. It seems reasonable to conclude that there would be a great deal of anxiety around his attacks when entering a new job which consequently makes him irritable and causes difficulties for him there. In the same way the difficulties he encounters would produce consequent frustrations and added anxieties on the successive job.

Summary

Not enough history is known to understand the consequences of this boy's early environment or his emotional life. However, it would appear that the boy's difficulties began only after the onset of his seizures as he appeared to be fairly well-adjusted prior to them. For this reason it would appear that his difficulties are rather directly connected with his attacks.

Case IV

> Patient, aggirl of eighteen had been referred by another hospital because of a question of barbituate poisoning. She denied suicidal attempt and saidaa strange man had given her some sleeping pills for a headache and she had taken a dose of them. She came to the hospital with afriend because her mother had been unwilling to come.
>
> For the past ten years he had attacks of unconsciousness which occurred suddenly but patient would feel them coming on because of the buzzing in her ears. For the past two years she had severe headaches with nausea and vomiting, occurring on the average of every two weeks but occasionally as often as three times a week. The encephalogram showed wave cycles "consistent with epilepsy."
>
> The family were on Aid to Dependent Children as the father was unable to work due to pulmonary tuberculosis infection which had been arrested. He spent little time at home being most of the time at his mother's home. Patient's mother was brought up strictly, but despite, this, became pregnant by another man prior to marrying patient's father. She is an attractive

woman who complained of her own illness and hard lot a great deal and did not want to speak of patient's illness. There is much friction between the patient and her mother. The latter felt the girl was more close to her father who was very devoted to her and that she did not care for the mother. She, herself, preferred the daughter who is one year younger than the patient.

Patient went as far as the third year High School. She left when she could no longer concentrate on her work. She had worked as a waitress in a restaurant but did not like it because some mentbothered" her, and she then became interested in hairdressing. She is a quiet, religiously inclined girl and had a boy friend whom she felt she could not marry because she was "sick." She has a few girl friends and is particularly fond of dogs, collecting pictures, and going to the movies.

Analysis

Patient, a girl of eighteen, had been rejected by her mother in favor of a younger sister. The marital situation at home seems to be an unhappy one with the father ill and unable to work, and spending most of the time at his mother's house. There is much friction between the mother and the girl. In view of the father's closeness and devotion to the girl on one hand and his disinterest in the home on the other, the quarrelling between the two women may be largely based on the rivalry for the husband's affection. The girl's concern regarding men "bothering" her, her retreat into a profession where there would be little contact with men, and her feeling that she can't marry her boy friend because she is sick might indicate

considerable guilt over her love and unconscious desire for her father. It is interesting to note her use of her illness to ward off marriage about which she seems quite ambivalent. It may very well have been that her unconscious guilt and anxiety about her relationship with her father and her consequent inability to make a normal adjustment to men drove her to the point of suicide, deliberate or not, to resolve this conflict.

Patient went as far as the third year High School. In view of the fact that epilepsy was present for the past ten years, the responsibility of the illness for her inability to concentrate in school is questionable, and again the possibility of anxiety and phantasies as contributing factors to her inattentiveness can not be overlooked.

Summary

There is sufficient disturbance in the family relationships, especially in the girl's relationship to her father to explain her problem. Epilepsy can be viewed as only a secondary or contributing factor in this case.

Case V

> Patient, a fourteen year old boy, was referred by the court because he was a delinquent child. He did not attend school and was brought into court as a stubborn child. Later he was again brought in for stealing some wire and a bicycle. In addition there was a history of epilepsy.
>
> The parents at one time dated the onset

of his epilepsy to an operation for sinus trouble when he was ten years old. At another time they said his spells were of one year's duration prior to referral. The mother's two nephews have epilepsy. A twitching of eye and facial features take place during his attacks which occurred usually at night and lasted from five to ten minutes. They occurred two and three times a month.

Both parents worked and were out of the home. The oldest, a girl of sixteen, did the housework and cooking. According to the parents, patient had not gotten along with the parents and the siblings ever since the epilepsy began. He had broken a few things in the home and pushed the family around when angry. He has not retained an interest in anything for any length of time, and has been staying out nights. The mother was rather protective of the child when he was discussed with her. She said she did not feel the boy was bad but rather that most of the trouble was due to his illness and that if he got the proper sleep he would be much better. Later she denied that he was troublesome at home.

Patient did well in school until the seventh grade. After that he just managed to get by until he left in the first year of High School to go to work. He had been a conduct problem since the seventh grade when he refused to do what he was told. Ever since he left school he has been working irregularly on milk trucks and in a garage. He said he could not work steadily becasse of his spells and hangs around when not working. He has always participated in sports and plays well with other boys.

Analysis

The mother was very protective of the boy and laid the responsibility of all his difficulties to his illness. There

is some inconsistency in dating the onset of his epilepsy which would indicate some emotional bloc in this connection. It may well be a further indication of a desire to shield the boy for fear he be considered "bad." There is some question therefore as to whether his difficulties did not date prior to his illness.

He was described by the parents as not having gotten along as well with them and the siblings dating from the time the sinus operation when presumably his epilepsy began. This would indicate that he might not have gotten along well previously but that the difficulties increased at that time. As his attacks usually came at night and were not very severe, they alone would not wholly explain his growing interest in leaving school and his subsequent withdrawal. What the mother's overprotectiveness of the boy meant in his development is difficult to determine. However, overprotectiveness is usually associated with guilt over rejection. The boy's quarrelling with his siblings and his parents which increased after onset of his illness may be directly related to his feelings of being rejected and different from the others. The stealing too may be a further symptom of his unsatisfied needs for affection. The fact that his difficulties with children are not extended to his playmates and that he does participate in their group activities might be indicative of the home as the

predominating source of anxiety to him.

Summary

Epilepsy may be a primary cause in this boy's difficulties. Moreover, there is strong evidence that the mother's overprotectiveness may have contributed a great deal to his problems, although there is not enough emotional and environmental data to make so conclusive a statement. In addition, her overprotectiveness raises the question as to whether his difficulties could not have had their inception prior to his illness.

Case VI

> Patient, a boy of fourteen, was referred by the court by reason of his being a delinquent child and having performed an unnatural and lascivious act. He forced a boy of ten and a girl of eight to disrobe, then, attempted to rape the girl and performed fallatio upon the boy. He then made them commit fallatio upon him. There was also a history of convulsions. The encephalogram showed definite evidence of some type of abnormal cerebral activity.
>
> His attacks were of five years duration and were of a generalized nature. At first they were chiefly on the right side; later, there was movement of both sides of the body and frothing at the mouth. Though during the first year he had only four convulsions, his attacks upon admission were three and four times a week.
>
> Family history was negative, but the familial background is poor. The father died

of pneumonia eleven years previously. The Veteran Bureau Administration reported him as having an irregular work history due to his frequent court committments for alcoholism and larceny. The S.P.C.C., to whom the family was known for some time, reported the mother as an untidy housekeeper and negligent mother, who left the children alone frequently. The family consisted of three sisters, one of whom was married and out of the home and two boys, the patient and a younger sibling, both of whom had had poliomyelitis in infancy. Their income consisted of a small government pension and the rent was paid by the city.

The patient is a well developed and nourished adolescent, who wears a brace on his left leg; he had been afflicted with poliomyelitis at twenty-two months of age. He is described as unsociable and irritable and frequently as becoming sullen and sarcastic. At Lakeside where he was operated upon for his leg, he was disobedient and surly, continually in trouble, and so disturbing the other patients that he did not remain as long as the doctors should have liked to have had him stay.

Of average intelligence, the patient went as far as the seventh grade and attained fairly good marks. Because of his epileptic attacks in school, he was forced to leave three years ago. Afterwards he had a tutor twice a week. Patient never associated normally with other children. He did not appear to be interested in anything and had never been employed.

Analysis

This is a situation of a boy of fourteen whose family family background showed much history of instability, alco-

holism, and larceny. In addition great home instability during the boy's early years, the father's death when the boy was three, and the mother's negligence and irresponsibility of the children brought little economic or emotional security for the boy. Furthermore, the traumatic experience of being afflicted with poliomyelitis from such an early age would only intensify his emotional insecurity and make it more difficult for him to participate in normal adolescent group activities. Forced to leave school because of his attacks, he was blocked still further from normal contacts with other children. This fact made any opportunity to learn to associate and be accepted by a group more remote. His chronic masturbation appears indicative of an attempt to solve his frustrations.

It would be interesting to speculate why his anti-social behaviour took the form of sexual activity, and of a bisexual nature. With the father dead at such an early age and the mother so rejecting of him, there may well have been a distorted father image and a confused identification father image and a confused identification with the parental figures. A simpler explanation can perhaps be seen in his attempt to prove his masculinity in the face of so much physical handicap and emotional insecurity. This would be true particularly since more normal and natural outlets such as group participa-

tion and sports were not open to him because of his inner unrest and his external handicaps.

Summary

It would be difficult in the light of this history to attribute this adolescent boy's problems culminating in anti-social behaviour merely to the epilepsy and the consequences of it. While it would appear that this handicap intensified his maladjustment, there is enough pathology in the familial relationship and the handicaps involved in his physical deformity to which to refer as important factors in his difficulties.

Case VII

> Patient, a sixteen year old boy, was referred by his mother because he displayed periods of marked frenzy and destructive behaviour during which time he threatened his mother. This occurred within a period of a month prior to hospitalization. There was also a history of epileptic seizures of one and a half years duration. The encephalogram showed abnormal activity "consistent with epilepsy."
>
> The attacks were of a generalized twitching biting of tonue, unconsciousness, foaming, and other symptoms of a grand mal seizure. There was amnesia upon waking from a long sleep.
>
> The mother suffered from migraine and fainting spells. A maternal cousin had petit mal attacks and a maternal aunt was hospitalized at Danvers State Hospital after childbirth. The parents are divorced, the father having been abusive to his wife and threatened to kill her.

> There is a history of bed wetting until the age of three; food fads, and nail biting continued to the present time. He went as far as the eighth grade in school repeated the first, second, and third, and left because of fainting spells.
>
> He has never been a sociable boy and did not adjust to his playmates but quarrelled with them. He enjoys playing by himself. There is no strong sexual interest and he has one girl friend whom he takes out to the movies occasionally. He is described as an unstable, morose, sullen and seclusive boy.
>
> Mother felt there had been a sudden personality change. For the year prior to referral he had occasionally worked as a furniture mover but because of his spells his work had not been steady.

Analysis

The picture here is of a sixteen year old boy whose family background reveals some pathology. The boy as a child may have reacted to the insecurity of a broken home with various symptoms such as his eneuresis, fussy eating habits, and nail biting indicative as attempts to gain some satisfactions and alleviate anxiety. It is interesting to note that this boy repeats the same behaviour pattern in relation to his mother as had the father. His apparent lack of interest in girls may further indicate some problem in his heterosexual development due perhaps to his unresolved conflict with his mother and unconscious identification with the father.

It is known that this boy was not well adjusted in his

relationships to other children even prior to the onset of his attacks and that he was unstable and seclusive. Nor can his poor school adjustment be wholly attributed to his illness as he was doing poorly there even before he became ill. Although the mother claims a sudden change in personality, she may not have seen the boy's former seclusiveness and moroseness as problems and became concerned only at the advent of overt aggressiveness. Again too, she may see his problem as of recent origin because of her own emotional defenses against seeing her personal role in his difficulties. Another possible explanation of the sudden onset of his anti-social behaviour may lie in the development of a psychosis.

Summary

Epilepsy as such can not be described as a completely determining psychological factor in this boy's problems.

Case VIII

> Patient, aged sixteen, was first referred by his mother when he was eleven years old because he was not doing well in school and was a behaviour problem. He stole, stayed out late at night, was unresponsive to discipline and fought with other children. In addition there was a history of spells of two years duration. These followed a head injury for which he was hospitalized. They occurred two and three times a week usually at night. They consisted of biting of the tongue and wetting. More often there were fainting spells once a month.

The boy is third of a family of ten children, six of whom are living. The father was described as a very nervous man and there was evidence of much incompatibility between the parents. The mother was exhausted from too much child bearing and many illnesses and could manage neither her children nor her house. Economic deprivation was great and the family were living on relief. Consequently, the mother was constantly irritable and frantic over the patient's misbehaviour.

Mother was not well while pregnant with patient. The child exhibited food fads, temper outbursts and was a chronic eneuretic. In school, he was restless, hyperactive and troublesome. In addition, his work was not up to capacity, but his mother said she did not want to push him. He liked to get attention and would indulge in all kinds of antics to attract it. He would arrive late, and dirty, and then proceed to upset the room. The parents were totally unable to control him.

When he was referred again, it was because the boy was eneuretic. At the time the discipline at home was felt to be inconsistent and he was still uncontrollable. The mother excused his bed wetting by attributing it a an inherited trait from the paternal side of the family. The school situation had improved and the boy was attending a regular high school instead of a trade school against the parents' consent. He was interested in sports and in girls and went frequently to dances. His eating habits were still irregular and fussy and he did not want to go away to camp because he did not like staying away from home. There appeared to be a better relationship with the father who spent more time with him and they often went fishing together.

Analysis

This is a situation of a sixteen year old boy who is subjected to the instability of an economically deprived home and to the insecurity engendered by the incompatibility and friction between the parents. In addition he is the third of a family of ten children where the mother is exhausted and constantly irritable with them. The fact that the boy was attempting to get more attention and went to such extremes to get it would be some indication of his apparent neglect at home. Moreover the mother's anxiety over the boy's behaviour would not be likely to result in good handling of the child or a diminishing of his own anxiety. She also seems to identify the boy with the husband in her attributing his bed-wetting as a paternal trait, and in this way, absolve herself from her responsibility in the matter. The child's insecurity is seen in his fear of going away from home to a camp.

His behaviour disorders such as food fads, temper outbursts and eneuresis precedes the onset of his seizures and suggest emotional difficulties in response to the insecurity felt in parental rejection and home instability. As soon as there was a betterment of the relationship with the father, it is seen that the boy improves in his schoool situation and in his relationships with other children.

Summary

The facts here do not substantiate any conclusion of

epilepsy as a dominating factor in the boy's problems.

Case IX

Patient, aged twenty, was referred by the court because after an intense quarrel with his older brother, who in a drunken spree had imitated the boy's spell and teased him about his incontinence, had smashed the older boy's radio, and threatened violence.

His seizures had begun six years earlier and were grand mal in type. They occurred more frequently at night and sometimes came as often as once and twice a week but more often came on a frequency of once or twice a month and lasted only a few moments. The encephalogram was "consistent with epilepsy."

The father occasionally went on sprees of drinking. The mother who was suffering from pernicious anemia worried a great deal over the children and frequently lost her temper. All the children had malnutrition in infancy because of poor feeding and one brother died of it. Patient was the third youngest of six children, the oldest being a girl and the remainder boys.

Delivery of the patient was difficult and forceps had to be used. There was no breast feeding. The boy went as far as the seventh grade and did fairly well there. However, with the onset of his convulsions at the age of fourteen, he left school because his schoolmates laughed at him. Although he is interested in girls, he did not go out with them because of the seizures, and had not had any sexual experiences. According to the father, no one would have anything to do with him because of his illness. He did not get along with friends. He has been irritable and quarrel-

> some with them and is extremely sensitive about his condition. If anyone teased him, he became very angry but had not until recently threatened any definite harm to anyone. Until one year ago, family said that although he was a little irritable, he got along well enough to be tolerated at home.
>
> He complained at the hospital that he receives no sympathy at home for his epilepsy, and feels that his inability to go out with girls is a great hardship to him. There was blocking and stammering when speaking of intimate subjects such as sex. Patient does not sleep well and was eneuretic only when sleeping in his sister's home. He is restless and bites his nails. He was described as being a shy, at times sulky and lazy boy by his family.

Analysis

Epilepsy seems to play here an important role in this boy's life as it prevents him from achieving normal relationships with other people and is of great concern to him. Important also are his feelings of rejection at home but even these seem to be focused around his epilepsy. It is, however, questionable, whether this boy may not be using his epilepsy as a defense and rationale for other more basic problems.

Summary

Epilepsy may be the most important contributing factor to this boy's anti-social behaviour. More probable, however, is that the patient is using the illness as a rallying point for other unsolved conflicts.

Case X

Patient, a girl of eleven, was referred by her mother because for the past few months she had been a behaviour problem, cursing, swearing, beating smaller children in the home and in the neighborhood. She had also been subject to convulsive seizures since the age of three. These occur more during the day than night and last for fifteen to forty-five minutes.

The father is a laborer and said to be steady and efficient in his job. Occasionally he had flights of temper or would drink too much. The mother was thought to be an intelligent, cooperative woman of even temper. The relationship between the parents was felt to be normal and adequate. The patient is the eldest of five children.

About two months prior to referral, mother noticed a change in the behaviour of the child. She used to be very good to the younger children and seemed quite fond of them. However, at that time she became easily angered and irritable. She would hurt her younger brother, and if she got in the least angry with him, she started a tantrum, swore and hit him. Two weeks previously, she had picked up a knife and threatened to kill him. She flared up on the slightest provocation, cried and screamed without the slightest reason, things which she had never done before. This was associated at the same time with onset of more frequent attacks of unconsciousness and convulsions.

She did not want to go to school. Although of average intelligence, she barely passed her grades. Though she apparantly had tried her best, she could not get good marks. Two months previous to hospitalization, she

left school because of the frequent spells.

She was described by the mother as of a stable temperament, obedient and pleasant up to two months before referral at which time she became aggressive. She has always associated with much younger children of six years or so. Although she tried to help out in simple housework, her mother did not allow her to do this as she feared increased attacks. The child was very sensitive about her seizures and now and then would ask her mother why she should have them while others did not.

Analysis

The sudden onset of the behaviour difficulties in conjunction with increased attacks would point to some interrelationship of the epilepsy with the child's difficulties. Yet this must not be assumed as implying that the difficulties rise from the epilepsy as such for it is well known that emotional disturbances may raise the threshold of the epileptic seizure.[21]

This girl's sensitivity about her epilepsy, her leaving school and the consequent loss of normal contact with other children may have caused a severe reaction. In addition, there seems to be overprotection on the mother's part and anxiety about the illness which may have communicated itself

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21 Fritz B. Talbot, op. cit., p. 23."...attacks may be precipitated by many factors,(i.e. improper diet, mental strain, fright, or any other psychic factor)."

to the child. The fact that she has always associated with younger children and that she could not work to capacity in school indicates an emotional disturbance prior to the two months when mother claims onset of the difficulties began.

Summary

In summary, then, the relationship here between epileptic and behaviour difficulties is perhaps more evident in this situation. But it is important to remember that there appears to be some emotional trauma in connection with the epilepsy which makes for problems and not the epilepsy *ipse facto*.

Case XI

> Patient, a boy of sixteen, was referred by the court because he was a delinquent child and had also stolen an automobile. There was a previous arrest for breaking and entering two years previously. There was also a history of epileptic seizures. These consisted of a sudden collapse and some stiffening of his entire body; there would be some jerking and occasional biting of his tongue. Sometimes there would be two spells at once. The encephalogram showed abnormalcy "consistent with epilepsy." These attacks occurred about once a month and lasted from five to ten minutes.
>
> There has been a great deal of fighting in the home. The father, not very intelligent a man, had been at times abusive to the children. The mother, an ill woman was very inadequate in the home. The parents were both very protective of the

boy and later denied the dangerous symptoms which they first had admitted. Their rejection of the child at the same time was quite frank. There was evidence of improper supervision in the home. This youth is the only boy of eight children and is the second youngest.

The boy was at first described by the family as having stolen, had attempted to choke different members of the family in his anger and also as throwing an ice pick about when losing his temper.

He went as far as his first year at high school but truanted although his marks had been good. He said he left because of the epilepsy.

He had always gotten along well with boys his own age and had not yet shown any interest in members of the opposite sex. He had also shown an interest and participation in sports; but had no special interests or abilities.

Analysis

This boy of sixteen comes from a home of friction and quarrelling and his insecurity is intensified by his parent's rejection. The fact that his problems date back from a time prior to the onset of his epilepsy is of significance perhaps in indicating that the etiology of his anti-social behaviour may have a basis other than his epileptic illness.

This boy has done well at school and yet has been truanting which is an indication of some emotional unrest. Although his attacks occur once a month and some of them are at night, he gives epilepsy as a reason for leaving.

In his social relationships he seems to be adequate and he has normal outlets in sports and contacts with other people. It would seem that his anti-social behaviour is limited to the familial situation and a rebellion against authority.

Case XII

> Patient, a twenty-one year old boy, was referred by the court because of a charge of lewdness. He approached two boys with his trousers open and his genitalia exposed, and tried to indulge them into sexual activity with him. There is also a history of frequent spells.
>
> Both parents had court records for illegal liquor sales. The father is a stubborn and boastful man. The mother died of tuberculosis several yearsa ago. Since that time the grandmother has had the supervision of the children and has proved herself incompetent. The S.P.C.C. knew the family and reported a bad home situation. They found both parents drunk and liquor being sold at the home. A woman was caring for the children as the patient's mother was employed outside the home. The home, itself, was scantily furnished, poorly heated and dirty. Patient was the oldest of six children, four girls and another boy beside himself.
>
> The S.P.C.C. again entered the situation in 1938 when the mother had died and the maternal grandmother was caring for the children. They found her inadequate with no control over the children. School officials reported the children troublesome, on the streets at all hours and neglected.

Two of the siblings got into trouble with the polie for their aggressive acts. Another brother was found guilty of a sex offense.

Patient was born with a short leg, and has worn a brace off and on. He went to a vocational school for two years and took the first year printing, and the second year stayed in the office. At one time he was interested in studying for the priesthood and went to New York for a week for this purpose but gave it up. Because of this interest, he never went out with any girl although he has many boy friends. He worked for a while as a helper in a chocolate factory but was discharged because of his frequent spells.

Analysis

In the life experience of this twenty-one year old boy, there is a family background which presents a great deal of pathology. The physical or emotional tone of the home seems to have held little security for the boy and several of the siblings strongly reacted to their deprivation. In addition, this boy has a physical handicap which would have barred him from normal contacts and group participation. It is interesting to note in this connection, his desire to study for the priesthood which would give him a rationale for withdrawal from society. Yet, he could not go through with this study and it would seem suspect that his repressed sexual urges burst forth. It is noteworthy that the victims of his sexual activity are boys and not girls. This fact would be

indicative of great sexual inhibition on his part which may have its basis in feelings of inferiority around his physical handicaps because of earlier insecurities. The other boy in the family was also found guilty earlier of a sex offense and it is speculative how much there was of identification with the brother.

Summary

The pathological factors in this situation are too many and varied for an interpretation of epilepsy as the main contributing factor in this boy's difficulties.

TABLE I

ANTI-SOCIAL BEHAVIOUR

VIOLENCE		
	toward self	1
	toward others	7
STEALING*		1
SEXUAL OFFENCES		3

* Where this was main offence and not incidental.

From the above table it is seen that the explosive violent type of anti-social behaviour in this group seemed the most predominant and amounted to 66% of the total amount while the sex offences were 25% of the total cases.

TABLE II

HOME BACKGROUND

BROKEN HOMES		
	where parents divorced*	2
	where one parent deceased	4
FRICTION IN THE HOME		3
ADEQUATE PARENTAL RELATIONS**		3

* parents were separated for a time before they were divorced.

** in one of these situations, both parents were out of the home working.

Poor home backgrounds counted for 75% of the cases. The correlation between delinquency of epileptics and social milieu would seem to be quite positive.

TABLE III

RELATIONSHIP BETWEEN AGE OF PATIENT, SEX, LENGTH OF EPILEPSY PRIOR TO REFERRAL, SEVERITY OF ILLNESS, AND ONSET OF ANTI-SOCIAL BEHAVIOUR.

Age	Sex	Length of epilepsy	Severity of illness	Onset of anti-social behaviour in relation to referral
16	F	5 yrs.	1 attack per mo.	1 year
18	F	10 yrs.	2 attacks per mo.	½ year
14	M	4 yrs.	2 to 3 attacks "	4 years
14	M	5 yrs.	12 to 16 attacks"	early childhood
19	M	3 yrs.	1 attack per mo.	on referral
21	M	4 yrs.	Unknown	18 to 19 years
16	M	1½yrs.	Unknown	1 month
11	M	2 yrs.	8 to 12 attacks "	early childhood
11	F	3 yrs.	Unknown	2 mos.
20	M	6 yrs.	4 to 8 attacks "	early childhood
16	M	1 yr.	1 to 2 attacks "	2 years
21	M	sev. yrs.	frequently	on referral

The age here ranges from early to late adolescence. Although three quarters of the cases are males, there is not sufficient evidence considering the number of cases, to enable us to make any generalizations as to the predominance of males in anti-social behaviour of epileptic adolescents. Furthermore there is no evidence of any causal relationship of age, sex, length of epilepsy, its severity to the onset of anti-sociality.

CHAPTER IV

SUMMARY AND FINDINGS

In summary, the study of the twelve cases presented here have dealt with the relationship of a child to himself and his environment when epilepsy and adolescence are both present to complicate the situation. In every case anti-social behaviour was the end result. One of the aims has been to understand better the genesis and development of this behaviour. Has it been due to the fact of epilepsy alone or have individual problems tried to find some solution or escape in a particular mode of behaviour. In this connection, it is interesting to note that the age of onset of epilepsy rarely corresponded with that of the anti-social behaviour. In the majority of cases behaviour disorders occurred prior to onset of epilepsy.

While some advocates of the theory of an epileptic personality might call this type of behaviour an epileptic equivalent,[22] the trend today is away from this kind of biological thinking;[23] and case histories indicate in these situations gross deficiencies in the environment.

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22 R.C. Rows and W.E. Bond, op. cit., p. 101.

23 J. Notkin, "Is there an epileptic personality?" Archives of Neurology and Psychiatry, 20:779-803, 1928.

For the most part these children have suffered from great insecurities whose relation to epilepsy is indirect. These fall under the headings of parental rejections, broken homes, no continuity in training and inconsistent handlings. In some of the situations confused identifications followed a loss of a parent at an early age through separation, death, or divorce, and where no satisfactory substitute was made.

Such pathology in the family background as alcoholism, mental abnormalities, epilepsy, mental deficiency, etc. did not allow a favorable environment for normal growth in the majority of the cases. Of course, the preponderance of cases with low social backgrounds, natural to public institutions, may be responsible for the weighing of the results in favor of the environment as a cause for anti-social behaviour.

Undoubtedly, epilepsy itself creates a particular environment for the child. It may be rejection, overtly expressed or indirectly hidden in the parental overindulgence and overprotectiveness; or, it may be used as a rationalization for withdrawal by the child from a difficult or troublesome situation. It may be used in a variety of ways. However, what particular influence epilepsy will play is inextricably bound with the basic familial attitudes and the surrounding environment and the interaction between all these factors.

Epilepsy can not be viewed as an isolated factor with no

relation to the other elements in the individual's environment. For this reason, it is difficult to extricate and determine it's relationship in the maze of a complicated web of human relations. However, a more approachable goal that can be set is to try to see its significance in the total life experience of the individual.

If the twelve cases are studied in detail, it is discovered that six are from broken homes where one parent was not present due to separation, divorce or death. (Sometimes the second parent was not living continuously with the child). In three of the homes although both parents were present there was much friction and quarrelling.

In one of the cases where onset of the behaviour difficulty was sudden, adjustment prior to referral good, and where there did not seem to be any overt cause for the anti-social behaviour, it was felt that the epilepsy, due to an organic damage, may have been responsible for the unexplained uncontrolled rages. In Cases IX and X, it seems that the emotional attitude the patient carried over to his illness was one of the most significant elements in his anti-social behaviour. In one case, it appeared to block him from attempting to express his normal adolescent drives, and in the other, to express aggressively a protest against her "difference" from other children, communicated and intensified from an overanxious parent.

The remaining eight patients appear to have unresolved personality difficulties rooted primarily in basic familial relationships in which the epilepsy undoubtedly played some part as already stated above. The approach of adolescence with its train of intensified drives and needs made any solution or fulfillment more difficult.

Only one of all these children finished high school although all were capable mentally.[24] The reason given for the withdrawal in all of these cases was the existing epilepsy. In some the epilepsy was severe and the withdrawal may have been justifiable; in others, where epilepsy had existed for some time, and where it was not very severe,[25] the epilepsy clearly served as a rationale for withdrawing from a difficult situation due to other conflicts or as an expression of inner tension and unrest. For recent studies indicate there is no deterioration of mental processes inherent in epilepsy.

In the eight cases cited above, there were poor relationships with other children of their own and the opposite sex, in the home and at work. Subsequent history known in one situation showed improvement in relationships with contemporaries but only after the relationship with the father had improved.

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24 A.L. Collins, C.R. Atwell, M.Moore, op. cit., 51-63.

25 J. Fetterman and M.R. Barnes, op. cit., 797-801.

Frustrated in every area of adolescent need by a combination of epilepsy and their own unresolved conflicts which barred them, whether on a real or unreal basis, from school and natural outlets in vocational preparation and group participation, from natural sexual exploration, in fact from any ego satisfactions in academic, social or work achievements, these children became victims of their own mounting tension and aggression. Two of these children had, in addition, physical handicaps other than epilepsy which increased existing feels of inadequacy.

When the types of anti-social behaviour of these children are examined, aggressiveness is predominant because this sort of behaviour is most offensive to society and therefore comes to light earlier and more often than the non-aggressive neurotic type.

The aggressions of these epileptics have been broken down further in the table. From studies on delinquency by psychiatrists, it has been learned that the aggressions juvenile delinquents present have an emotional basis due to trauma sustained by the child in his relationship to the total environment.[26] His early life experiences within the family group are usually considered most significant. Here,

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26 United States Dept. of Labor, Understanding Juvenile Delinquency. Childrens Bureau, Publication 300, Gov't Printing Office, 1943.

too, among the epileptic adolescents the same principle is seen in operation. For, if the fact of epilepsy were sufficient to explain the aggression, then, it would follow that children would manifest anti-social behaviour to the degree of the severity of their illness but the fact that some extreme cases do not show anti-social behaviour while some mild cases do indicates that there is no direct correlation between severity of illness and aggression expressed.[27] There must be then some other factor or factors in operation which give rise to anti-social behaviour. It has been stated what these factors might be and the correlation then lies between the extent of the child's personality difficulties and the anti-social behaviour. A study of epileptic children of a higher social group and better familial relationships would be valuable for purposes of comparison.

In conclusion, it is hoped that this study will point to a more careful analysis of the causal factors operating in the pathological behaviour of the epileptic adolescent.

Superficially, the cases might present a thesis for any and all of the theories on delinquency. The Social Darwinian might point to the poor calibre of parentage (so many drunken

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27 E.B.S. Sullivan and L. Gahagen, "On Intelligence of epileptic children," GeneticPsychological Monogram, 1935, 17, 309-36. "It is not possible to distinguish in the epileptic group of normal intelligence the cases that will become problems.... The authors found no relation to age, sex, causation or severity.

fathers, so many irresponsible mothers): the strict biologist could refer to the patent fact of epilepsy and the epileptic personality, surrounded by an aura of aggression whose natural expression is anti-social; the environmentalist might cite the lower-class status of the patients as proof of their greater susceptibility to the contagious virus of crime; the psychiatrist would trace in all of these cases some early history of maladjustment.

The problem then is not to segregate or emphasize one particular factor as the only factor for anti-social behaviour of epileptic adolescents. The problem is rather to evaluate the strength and effect of each of the possible causes in the cases under consideration, severally and as a whole. The results may prove inconclusive in terms of certification of one theory as the correct theory, yet, to the extent to which insight is gained into the complexity of the problem, and into the dynamic nature of every psychological and social event, the treatment of abnormal behaviour in epileptic children will have been advanced. Anything short of this approach makes it more difficult for the patient and prevents an early solution of the problem. The biological approach which is most prevalent creates a defeatism in cases of epilepsy, both in meeting the situation and contributes to the popular conception of epilepsy as a mental disorder. A better understanding and

more careful awareness of the dynamics involved here will point the way to a more individualized and thus more effective casework approach in treatment of these children.

Approved,

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